News from NREM

Professor Joshua Gruver Receives Academic Excellence Grant from President Ferguson for Muncie Food Hub Proposal

Hard work recently paid off for NREM professor Dr. Joshua Gruver. A summer filled with collaboration and grant writing ended with Dr. Gruver, along with Co-PIs Scott Truex (from Urban Planning) and James Eflin (from NREM), receiving an Academic Excellence Grant as part of President Ferguson’s 18 by ’18 plan that aims to “...make the university more student-centered and community-engaged,” according to a recent article in the Ball State Daily.

Out of 105 proposals submitted from various departments on campus, only 16 were selected by Provost Terry King and President Ferguson for funding. Gruver’s Muncie Food Hub Partnership Project (MFHP) was awarded $294,042 to develop a downtown Muncie urban food hub.

Gruver envisions the project, which will be located in the old Cintas industrial laundry building (renamed Gearbox Muncie and owned by Sustainable Muncie), to start out as a local food aggregation and distribution center that may potentially grow into a retail space, with a permanent farmer’s market.

“A main goal of the food hub idea is to open up new markets for local farmers (in addition to the farmers’ market at Minnetrista), and act as a sort of ‘middleman,’ distributing locally sourced food-stuff to schools, institutions, and grocery stores, for example,” he explained.

According to Gruver, Delaware County contains multiple areas that are considered by the USDA as “food deserts,” or, “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food,” as defined by the USDA.

Gruver hopes that the Muncie Food Hub will not only provide fresh local food to businesses and institutions in East Central IN, but also to local people living in these areas. It will be one of only four existing food hubs in Indiana.

Dr. Gruver and other professors on campus have a growing interest in food systems and sustainable agriculture. This project is a unique way to merge community development with new Ball State curriculum. According to Gruver, two graduate assistants will be hired to help develop this project and help teach an urban agriculture class, taught by Scott Truex in Urban Planning. An immersive learning project, starting in spring 2016, will engage interested students to develop a food security assessment within the ECI region. This assessment will help the Food Hub effort gauge ECI’s food needs and how best to serve those needs and take advantage of existing opportunities.

As far as a timeline is concerned, Gruver stated that the project should begin the construction and remodeling of the building next January. He estimates that by the summer of 2017, after contracts and agreements are made with local farmers and growers, there will hopefully be fresh local product ready to sell to consumers at affordable prices.
NREM Welcomes Dr. Stephen Dickerson; Interim Chair Dr. Amy Gregg Steps Into New Position

Dr. Amy Gregg Steps Up as Dr. James Eflin Steps Down

After graciously serving NREM as Department Chair for the past nine years (three terms), Dr. James Eflin stepped down from the position at the end of the Spring 2015 semester. He has returned to the role of full-time faculty member. Dr. Amy Gregg, a long-time NREM associate professor and student advisor, was chosen to fill this role, and officially began her new duties in July as Interim Chair.

Having been with the department for 15 years, Gregg is excited to explore this new role and learn more about many of the “behind-the-scenes” processes that keep the department running. She highly enjoys advising students one-on-one about their academic program, working with the Alumni Board to plan events, strategic planning efforts with other faculty to consider curriculum and the future of the program, and collaborating with other units on campus.

“I'd really like to revisit the undergrad program and make sure we're keeping it up to speed with related job requirements. I'd also like to have more graduate-only classes,” Gregg expressed in regards to implementing any new initiatives for the department.

She also likes event-planning and hopes to organize more career panels, picnics, and other ways to get students and alumni working together.

When asked about her overall goals for NREM in the coming year, Gregg stated that she'd really like to boost the marketing efforts of the program and brand, hopefully helping students find out about the department earlier in their college careers. A new logo will hopefully be a part of this effort.

In addition to learning her new roles as Chair, Gregg is also teaching Outdoor Recreation, which this semester involves a unique immersive learning project on 80 acres of land in Albion, IN (more to come on this later).

She is very much enjoying her new position and as always, welcomes students to come meet with her and discuss courses and career paths.

When asked what her favorite thing about working in the NREM department would be, she stated, “The people here are very passionate and care about bigger issues. We're a small group but we get a lot accomplished.”

Dr. Stephen Dickerson

Originally from New Castle, IN, Dr. Stephen Dickerson's education and career paths are long and varied. Earning both a BA and an MA in Earth Science and Natural Resources from Ball State, he went on to gain a teaching endorsement that allowed him to teach Earth Science, Geography, and Environmental Science to junior high students. Realizing this passion for education, Dickerson decided to continue his own education and earn his Ed.S. in Ball State’s School of Superintendence, and finally, a doctorate degree in Educational Leadership.

Early on, however, Dickerson developed an interest in wastewater and the water industry. At a young age, he got a glimpse into the field through his father’s work in the wastewater industry, with Dickerson Labs, the first of its kind in the state. Following in his father’s footsteps, he received his first wastewater operator certification at age 19.

He later utilized his undergraduate and master’s degrees as a physical scientist, representing the EPA at the Indiana State Board of Health (now IDEM) for two years. He’s done consulting work for a civil engineering firm, in the area of wastewater, in addition to being the superintendent of multiple wastewater treatment plants.

Dickerson’s passion for the field of education has led him to spend another portion of his career working as an educator. He’s taught numerous science courses while also coaching basketball, football, and tennis at the junior high and high school levels. In total, he spent eight years as an assistant superintendent and 22 years as a high school principal.

Teaching natural resource courses at the university level, especially at Ball State, has always been something Dickerson has wanted to pursue. The open position in NREM to teach water courses was the ideal fit.

In his first semester with the department, Dickerson is teaching NREM 101, Water Resources, Wastewater Treatment, and an honors Earth Science course. He hopes to share with his students as much knowledge as possible, constantly improving his teaching methods, and even improving curriculum if needed.

When he does (rarely these days) find himself with free time, Dr. Dickerson chooses to spend it first and foremost with his family: his wife, four children, and six grandchildren. He also enjoys walking, hiking, playing golf, fly fishing, reading, and traveling.
NREM Welcomes Five New Graduate Assistants

Lindsay Hylton, of Fishers, IN, is diving into her second semester as a GA for the NREM department. A proud Hoosier, she graduated from IU Bloomington in 2011, where she studied Environmental Management, with a minor in Spanish. Hoping to explore the environmental field, she completed an internship with the Wisconsin Energy Conservation Corporation (WECC) in Indianapolis, where she created a white paper on current renewable energy resources and policies in the Midwest. Having graduated during a difficult job market, she dabbled in multiple odd jobs before finally realizing that she wanted to pursue graduate school and further explore her passion for helping the environment. Ready for a new experience, she looked to Ball State and enrolled in the NREM Master’s program in the Fall of 2014. In the meantime, Lindsay took on another internship with the Wetlands and Stormwater section at IDEM, where she traveled the state and gained field experience. Her primary interests are water quality issues and water resource management, along with the topics of renewable energy and climate change. She spent this past summer working on her thesis research, sampling the White River for microplastic particles from three different bridge sites. It’s been a challenging and exciting experience that’s taught her a lot about overcoming obstacles and thinking outside the box. When she finds some free time, Lindsay enjoys traveling to new places, kayaking, white water rafting, and spending time with friends and family.

Emily Hart, from Bloomington, decided not to take on the mantle of the IU Hoosier and instead came to Ball State for her undergrad degree, in order to study vocal performance in the School of Music. However, after one semester, Emily decided that the life of an opera singer was not for her. She decided to create her own major in Social and Environmental Sustainability instead, and graduated in May of 2015. Muncie had its hold on Emily and she decided to stay as a Master’s student in the NREM department. She is really intrigued by the project-based MA degree option. Emily is most interested in sustainable agriculture and using locally-based food production to improve food security, improve environmental conditions and biodiversity, and address oppression and inequality. She would love to help address Muncie’s problem with food deserts and restore the town’s legacy of urban gardens. Outside of Ball State, Emily works as the music director and community garden manager at Riverside United Methodist Church. She loves plants and gardening; Wes Anderson movies; the dulcet tones of Sufjan Stevens; singing; reading; cats; tea, coffee, craft beer, and bourbon, and being a “vegetarian/socialist/feminist killjoy.” Emily’s go-to fun fact about her life is that she is the oldest of eight children. She lives with her husband Colin, who is an instructor in the Department of Theatre and Dance, and her Siamese cat Zissou.

Andrew Imboden hails from the mountains of North Carolina. There he attended Wake Forest University, where he studied Anthropology and Religion, graduating in 2011. Growing up, artistic expression and agriculture were valued areas of his upbringing. This helped spark a strong interest in wine grape agriculture and winemaking. Following graduation, Andrew worked as a housing administrator under the Office of Student Life at his university. After remaining rather sedentary for two years, he began an 18-month online certificate course in viticulture (grape agriculture) through Washington State University. He left his job and began managing vineyards as an independent contractor in the emerging wine region of Yadkin Valley, NC. He then moved to Muncie with his fiancée, Mary, in May of 2014 and began working for a startup vineyard and winery near Indianapolis. After months of constant commuting, he began looking elsewhere and discovered the NREM graduate program. He realized he could supplement his knowledge of grapes and wine with research in sustainable agriculture, although grad school was the LAST route he ever expected to take. Andrew began his studies at Ball State last January and is now a GA, teaching labs for NREM 101. His interests are varied and, in addition to sustainable agriculture, include forestry, habitat restoration, wildlife management, and recreation planning. In his free time, Andrew enjoys hiking with Mary and their dog Apache, who is an excellent swimmer, always looking for a nice lake or river to frolic in. Andrew also likes to tool leather, garden, and build furniture and home décor.
**NREM Welcomes Five New Graduate Assistants**

**Cathy Egler**, of Fort Wayne, has always loved nature, which has led her to various careers in natural resources. She graduated from Ball State in 1979 with a degree in Environmental Interpretation. She then landed a 13-week internship at Land-Between-the-Lakes, a national demonstration area in Kentucky, where she gained invaluable experience leading nature walks, coming face-to-face with rattlesnakes, and gaining a love for bird and tree identification. After graduation she was hired as a temporary Young Adult Conservation Corp naturalist in the most visited state recreation area in Colorado. Following her next position at Marathon Oil Research Center in Denver, the oil market crashed and Cathy and her husband, a geologist, along with their baby daughter, moved back to Indiana to pursue new, more lucrative career paths and be closer to family. During this time, she took a slight detour and opened her own pie bakery-restaurant for nine years. However, she began missing her work outdoors and took some gardening and tree courses, leading her to a position with the IDNR as an Assistant Urban Forester. A new desire to study forestry next took her to Purdue, where she discovered a love of soils. She switched gears to obtain her Master’s in Agronomy, with a concentration in soils. After completing her degree she began assisting with the soils judging team and realized that she also loved teaching. She currently teaches the soils judging lab at Purdue and commutes to Ball State, where she works as a GA with Dr. Ghezzi, doing soils research. Cathy lives on a corn and soybean farm with her husband and loves mowing her big backyard and tending to many flower gardens.

**Kristoper Green**, originally from Dunkirk, IN, spent 12 years growing up in sunny Bradenton, FL. He returned to Indiana to attend Ball State for his undergraduate degree in the NREM department, majoring in environmental management, with a concentration in soil and water quality. He graduated last spring and has had work experiences in soil excavation, and as an agricultural water drainage technician, which fueled his desire to return to school and gain an M.S. degree in the field of soil science. His passion for exploring soil science in the NREM department was solidified by his field experience gained through traveling with the soils judging team. Ultimately, he chose to return to NREM because of the close working comradery between graduate students and faculty. He feels that the small but resourceful department provides all the needed amenities of a major university, while maintaining the open work atmosphere of a small college. His research interests as a graduate student are examining the relationship between nutrient loss in agricultural settings and different best management practices, such as cover crops and tile drainage systems. Specifically, he’s interested in studying the movement of soil nutrients known to cause water quality degradation through tile drainage discharge. His hobbies outside of Ball State tend to mirror his research interests. He is currently an active coach of the BSU soil judging team as well as an avid outdoor enthusiast. Kris enjoys hunting, competition shooting, hiking, kayaking, and snowmobiling.

**NREM Says Farewell to Dr. Jarka Popovicova**

The Department of Natural Resources and Environmental Management bid a sad farewell to Dr. Jarka Popovicova at the end of the 2015 spring semester as she decided to pursue new adventures internationally. Having taught most of the water-related courses in the department for the past 12 years, she was an impactful part of the NREM team and will be dearly missed. She is seen in the photo to the right at her ‘farewell’ picnic, opening a gift from the department. We thank her for her contributions to NREM and wish her happiness and success going forward.
Dr. Jessi Ghezzi discusses the outcome of a unique learning experience

A course taught over the last spring semester by Dr. Jessi Ghezzi involved some unique collaborations and impressive end results for the students of NREM 299x. The immersive learning course, with a total of six students, came about when Ghezzi was approached by the Indiana State Fair’s Pathway to Water Quality (PWQ) board, seeking help in creating new educational signage for the popular fair exhibit.

According to Ghezzi, “The goals for the course were to create educational signage and to expand the current exhibit to give fair-goers, and the K-12 field trips that come through the exhibit year-round, an educational opportunity to better understand soil and water quality concepts and what homeowners and agriculturalists can do to improve soil and water quality.”

The small group of six students were given the challenge of collaborating with eleven governmental agencies in order to create and approve the various signage, in addition to working with the 52 students of Dr. Jarka Popovicova’s Water Resources course, who also contributed material for the project. It was a definite challenge to schedule meetings and collaborate with so many contributors.

An Immersive Learning Grant allowed for Dr. Ghezzi to teach the course, have a graduate assistant, and provide the materials that were needed to create the signage for the actual exhibit.

“The grant is currently paying for students to create a survey to give to fair-goers (about 80,000 per year) to answer questions before and after they walk through the exhibit, to see how effectively the educational signage is working,” Ghezzi explained.

The final product was even better than Ghezzi or her class had anticipated, which was a pleasant surprise for the community partners involved.

“The end product included 16 permanent display signs with educational information for the different stations of the exhibit, two five-foot mascot displays with face cut-outs for pictures, a coloring book for children, and a 66-page document with designs for exhibit expansion and educational activities.”

With beautiful new material for the fair’s PWQ exhibit and a great learning experience under their belts, Ghezzi and her class call the course a definite success. She says she absolutely plans to teach more courses like this one in the future and is already working with a new community partner for a course that’s in the works for next summer, if all goes as planned.
News from NREM

**NREM Fall Career Panel Connects Students with Alumni**

The end of October brought six alumni back to NREM for the department’s annual Fall Career Panel. Terry Coleman (BS’84), Bruce Oldham (BS’98), Megan Bolyard (BS’06), John Schaust (BS’80), John Maher (BS’85), and Bryan Preston (MS’12 in Geography) graciously took time from their busy schedules to return to NREM and speak with current undergrad and graduate students about where their careers have taken them since graduation. The 30 students in attendance enjoyed pizza provided by the NREM Alumni Society and appreciated the opportunity to ask questions and speak one-on-one with alumni after the presentation. We’d like to give a big Thank You to all of the alumni who attended, along with Sue Taylor and the NREM Alumni Society for providing the food.

**NREM Grad Student, Damy Alalade, Attends AIPG Conference in Alaska**

Oludamilola (Damy) Alalade, in his second year as an NREM graduate student, recently returned from the National Conference of the American Institute of Professional Geologists, in Anchorage, Alaska. Alalade, of Nigeria, received his undergraduate degree in Geology and is currently studying the removal of hydraulic fracturing fluids from petroleum wastewater by means of sorption techniques, for his thesis research. He became interested in the topic when he noticed how many oil fields around the world are utilizing hydraulic fracturing to extract oil, which requires a great deal of fresh water in the process. He wants to explore better ways for the industry to recycle this water and require less of it overall.

Although his research is not yet complete, Damy was excited to share his research ideas with other professionals from the field of geology and hear what they had to say about it. The conference hosted 178 attendees from various governmental organizations and private companies. Alalade was 1 of 37 presenters at the Anchorage conference and said that he feels his presentation went very well. “People asked me many questions and I was able to provide them with answers,” Alalade stated.

Damy also mentioned that the AIPG would like him to submit an article about his work for the next student issue of *The Professional Geologist*.

Overall, Damy says the main goal of his research is to find a better solution for removing hydraulic fracturing fluid from water. “There are lots of technologies available but some are very expensive and others are just not effective.”

Looking toward the future, Damy hopes to become a Licensed Professional Geologist and work as an environmental scientist with an oil exploration company.
Support NREM and Achieve Active Alumni Status!

The Ball State University Alumni Association has historically provided “active status” to alumni when they make monetary gifts to the BSU Foundation. These monetary gifts may be of any amount, to any BSU Foundation account, and take the place of a dues paying program that some other universities utilize. Please consider becoming active by supporting NREM scholarships and programs.

Your gift may be designated to any account in the BSU Foundation, including NREM. (Indiana residents can receive a 50% gift tax credit up to $200 when they file form CC-40 with their state taxes, reducing their out-of-pocket cost). Please contact either the BSUAA or Ball State University Foundation for more information or ask your accountant or CPA.

Alumni and friends are asked to consider a gift to one or more of the following BSU Foundation accounts that support programs and scholarships related to NREM:

- 6201 General welfare of the NREM department
- 6203 Operation of the Hults Environmental Learning Center
- 6204 NREM Alumni Society activities and award programs
- 6216 Research programs with the NREM department
- 6217 Soil research projects with the NREM department
- 6218 Soil and water conservation education activities
- 6219 Renewable energy and industrial ecology research
- 6250 NREM scholarships
- 6253 Clyde Hibbs Scholarship
- 6254 Alex and Ana Nicoloff Scholarship
- 6255 Charles Mortensen Fellowship

Questions?

To make a donation, please visit the NREM website and click on the link labeled “Make a Gift.” Or click this link: www.bsu.edu/giving

- For more information about giving to NREM, contact Kassie Cosgrove at kkcsgrove@bsu.edu
- To support the creation of a new scholarship, contact Dr. Amy Gregg, NREM Interim Department Chair at 765-285-5781 or algregg2@bsu.edu

Visit us on the Web!
http://www.bsu.edu/nrem

Contact NREM and submit news for consideration in the newsletter!

- For more information about news and upcoming events, contact Karee Buffin, administrative coordinator, 765-285-5780, nrem@bsu.edu
- Please send news about promotions or new positions, recognitions, and changes in your contact information to NREM Alumni Society at bsualumni@bsu.edu or 765-285-1408.
- “Like” NREM Alumni Society on Facebook, and visit their website. Click here to nominate an alumnus for an award. Also, visit NREM at Ball State University on Facebook for updates on current events.

Thank You!

NREM would like to thank those individuals who contributed to this issue of the newsletter. Your input is appreciated! Our gratitude goes to:

- Steve Dickerson
- Amy Gregg
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- Andrew Imboden
- Kristopher Green
- Cathy Egler
- Damy Alalade
- Sue Taylor

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